WEEKLY SUMMARY REPORT USEPA OVERSIGHT, SAUGET AREA 2, SAUGET, ILLINOIS WA NO. 123-RSBD-05XX/ CONTRACT NO. 68-W6-0025

WEEK ENDING FRIDAY, JUNE 28, 2002

DATES OF CH2M HILL OVERSIGHT:

CH2M HILL provided field oversight of URS activities at Sauget Area 2 sites from June 24 through June 28, 2002.

WORK PERFORMED THIS WEEK:

URS and Roberts Environmental Drilling (Roberts) of Millstadt, Illinois, conducted alluvial aquifer sampling at Sites O, S, and one upgradient location.

Innovative Probing Solutions (IPS) of Mt. Vernon, Illinois, completed the soil gas step-out locations at Sites O, P, R, and S.

Prosonic Corporation (Prosonic) of Marietta, Ohio, mobilized one sonic drilling rig on site and installed one bedrock monitoring well at Site S.

Environmental Management Alternative (EMA) of St. Louis, Missouri, was on site to transport 55-gallon drums of investigation derived waste from the field investigation areas to a fenced concrete drum storage pad adjacent to the field trailers.

On June 25, 2002, Mike Ribordy (USEPA, Region V), Sandy Bron (IEPA), Peter Barrett (CH2M HILL), Bob Veenstra (URS), and John Regan (Hearst and Associates) met on site to discuss the placement of anomaly trenches at Sites P, R, and S and waste characterization borings at Sites O, P, R, and S based on the magnetometer and soil gas survey results.

In general, the field methodologies follows those specified in the Support Sampling Plan. Site specific details are described as follows:

<u>Upgradient</u>

 Upgradient alluvial aquifer sample point UAA-02 was purged and sampled at the refusal depth of 124' below ground surface (bgs).

Site O

Soil gas step-out locations SG-O-55 and SG-O-50 north and south of Site O were completed. The soil gas samples collected at each location yielded a non-detect result. Therefore, no further soil gas points were necessary in either direction. No step-out locations were conducted east of Site O because of the non-detect soil gas results. Soil gas points could not be stepped out to the west because of site access issues on Clayton

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- Chemical property.
- Alluvial aquifer sample point AA-O-02 was advanced from 53' bgs to refusal at 121' bgs.
 URS purged and collected groundwater samples in ten-foot intervals. Approximately
 60' of geoprobe rod was lost in the boring when the threads joining to rods sheared.
- Alluvial aquifer sample point AA-O-03 was advanced from ground surface to refusal at 129' bgs. Groundwater was encountered at approximately 20' bgs. URS purged and sampled groundwater in ten foot intervals starting at 28' bgs.

Site P

• Soil gas step-out locations SG-P-38 and SG-P-37 east and west of Site P were completed. The soil gas samples collected at each location yielded a non-detect result. Therefore, no further soil gas points were necessary in either direction. No step-out location was conducted north of Site P because of non-detect soil gas results. Soil gas points could not be stepped out to the south because of the road and utilities.

Site R

• Soil gas step-out location SG-R-33 west of Site R was completed. The soil gas sample collected yielded a non-detect result. Therefore, no further soil gas points were necessary to the west. No step-out locations were conducted east or south of Site R because the two boundaries of Site R is adjacent. Site Q, which was delineated during the 2001 soil gas survey. Step-out locations were not conducted north of Site R because of the road and utilities.

Site S

- Soil gas step-out location SG-S-11 west of Site S was completed. The soil gas sample
 collected yielded a non-detect result. Therefore, no further soil gas point was necessary
 to the west.
- Alluvial aquifer sampling point AA-S-01 was advanced from ground surface to 94' bgs.
 Groundwater was encountered at 12' bgs. URS purged and sampled groundwater in ten foot intervals starting at 28' bgs.
- Alluvial aquifer sampling point AA-S-03 was advanced from ground surface to 64' bgs.
 Groundwater was encountered at 16' bgs. URS purged and sampled groundwater in ten foot intervals starting at 24' bgs.
- Bedrock well BDRK-S-01 was installed to a depth of 162' bgs. Highly weathered limestone was observed at approximately 132' bgs. A more intact limestone observed at 137' bgs was determined to be top of bedrock. Prosonic set the casing five feet into bedrock at a depth of 142' bgs prior to well installation. Following placement of a bentonite plug at 142' bgs and advancement of the borehole to 162' bgs, a two-inch PVC riser with five feet of well screen was placed in the borehole. A sand filter pack was poured into the annular space surrounding the well to a depth of 154' bgs. A bentonite seal was placed above the sand filter pack to a depth of 151' bgs. Prosonic tremied grout

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from the seal to ground surface.

ISSUES OR PROBLEMS ENCOUNTERED:

An agreement was reached to use bentonite pellets rather than a bentonite slurry to form the bentonite seal above the sand filter pack at BDRK-S-01. URS was concerned that a bentonite slurry would infiltrate the sand filter pack and cause problems during well development, purging and sampling.

WORK SCHEDULED FOR NEXT WEEK:

- One geoprobe rig will continue to collect alluvial aquifer samples at Site S.
- The second geoprobe rig will begin waste characterization borings.
- Prosonic will finish the surface completion of BDRK-S-01 and mobilize to a second bedrock well location.

**Next week it is anticipated that only two and a half days of field activities will be completed because of the holiday. Samples cannot be submitted to the laboratory after 1200 on Wednesday.

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